TRANSIT WEATHER INFORMATION REQUIREMENTS

Arthur L. Handman
Greater Hartford Transit District
Representing
Federal Transit Administration

2/28/00

TYPES OF TRANSIT SYSTEMS

- Rural (Bus and Paratransit)
- Urban:
  - Bus/Paratransit
  - Metro (Heavy Rail)
  - Light Rail
- Commuter Rail

WEATHER INFORMATION NEEDS

- At Gathering Stage (WIATSF of ITS efforts)
- Needs vary by user

SPECIFIC WEATHER PARAMETERS

- Freezing rain affects traction
- Fog affects visibility
- Snowfall rate and accumulation
- Temperature gradient/area
- Severe storm location

DECISION TIMING CRITICAL

- When is action required?
- What is forecast warning period?

WHO MAKES DECISION?

- Determines type and format of weather data
- Determines where weather information is sent

FEEDBACK

- Sensors on vehicles with MDTs
- Operator/Supervisor Observations

CURRENT STATUS

- Public/private reports
- Spot observations
- Internet (Weather Channel, e.g.)
- No standards for gathering or processing
- No standard decision matrix
- No standard instrumentation system architecture

UNIQUE EXPERIENCES/COST IMPACT

- Tornado destroyed bus - $45,000 to replace
- Annual weather related damage claims - $25,000
- Schedule delays - $1,150 per hr.

FUTURE NEEDS

- Gather and standardize transit industry weather information needs
- Develop decision matrixes
- Develop system architecture
- Train users